

WHAT IS CLAIMED IS:

1. A wireless communication system including a radio-signal base station,
and at least one mobile wireless terminal which operates in a power-saving mode
5 in which said mobile wireless terminal intermittently receives packet signals,
and in a normal mode in which said mobile wireless terminal regularly receives
packet signals,

wherein when said radio-signal base station receives packet signals
addressed to a mobile wireless terminal being in said power-saving mode, said
10 radio-signal base station temporarily stores the received packet signals until said
mobile wireless terminal requests said radio-signal base station to transmit said
packet signals thereto, and

said mobile wireless terminal requests said radio-signal base station to
transmit said packet signals thereto, receives a part of said packet signal from
15 said radio-signal base station, and, if said mobile wireless terminal judges that it
would be necessary to carry out real-time communication for receiving entirety of
said packet signals, said mobile wireless terminal transfers to said normal mode
from said power-saving mode for receiving entirety of said packet signals.

20 2. The wireless communication system as set forth in claim 1, wherein said
mobile wireless terminal transfers to said power-saving mode when entirety of
said packet signals has been received.

3. The wireless communication system as set forth in claim 1, wherein said
25 radio-signal base station periodically transmits an informative signal to said
mobile wireless terminal being in said power-saving mode, and said mobile
wireless terminal is aware that packet signals addressed to said mobile wireless
terminal are stored in said radio-signal base station, by analyzing the received
informative signal.

4. The wireless communication system as set forth in claim 3, wherein said mobile wireless terminal receives said informative signal in said power-saving mode at an interval determined by itself.

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5. The wireless communication system as set forth in claim 1, wherein if said mobile wireless terminal judges that it would not be necessary to carry out real-time communication for receiving entirety of said packet signals, said mobile wireless terminal intermittently receives said packet signals at a certain interval in said power-saving mode.

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6. The wireless communication system as set forth in claim 3, wherein said mobile wireless terminal receives said packet signals at an interval at which said mobile wireless terminal receives said informative signal from said radio-signal base station.

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7. The wireless communication system as set forth in claim 3, wherein said mobile wireless terminal receives said packet signals at an interval equal to $N \times I$, wherein said I indicates an interval at which said mobile wireless terminal receives said informative signal from said radio-signal base station, and said N is a positive integer equal to or greater than two (2).

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8. The wireless communication system as set forth in claim 1, wherein said mobile wireless terminal sets a longer interval at which said mobile wireless terminal receives said packet signals, for a smaller frequency at which said packet signals are transmitted from said radio-signal base station.

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9. The wireless communication system as set forth in claim 3, wherein said mobile wireless terminal sets a longer interval at which said mobile wireless

terminal receives said packet signals, if said mobile wireless terminal cannot receive said informative signal from said radio-signal base station.

10. The wireless communication system as set forth in claim 1, wherein said
5 mobile wireless terminal checks whether the received packet signals include data indicative of commencement of real-time communication, and if the received packet signals include such data, said mobile wireless terminal judges said packet signal to be received in real-time communication.

10 11. The wireless communication system as set forth in claim 1, wherein said mobile wireless terminal checks whether the received packet signals include real-time transmission protocol, and if the received packet signals include said real-time transmission protocol, said mobile wireless terminal judges said packet signal to be received in real-time communication.

15 12. The wireless communication system as set forth in claim 1, wherein said mobile wireless terminal is comprised of a cellular phone.

20 13. The wireless communication system as set forth in claim 1, wherein said radio-signal base station includes functions of:

transmitting packet signals for real-time communication to a communication network after certain protocol communication;

memorizing a mobile wireless terminal(s) which is(are) in said power-saving mode, among a plurality of mobile wireless terminals;

25 periodically transmitting an informative signal to said mobile wireless terminal which is in said power-saving mode;

temporarily storing packet signals addressed to said mobile wireless terminal which is in said power-saving mode;

when said radio-signal base station stores packet signals addressed to said

mobile wireless terminal which is in said power-saving mode, combining information indicating so to said informative signal; and

on receipt of a request from said mobile wireless terminal to transmit said packet signals stored therein, to said mobile wireless terminal, transmitting said
5 packet signals intermittently to a mobile wireless terminal which is in said power-saving mode, but regularly to said mobile wireless terminal, if said mobile wireless terminal is transferred to said normal mode.

14. The wireless communication system as set forth in claim 1, wherein said
10 mobile wireless terminal includes functions of:

when said mobile wireless terminal transfers to said power-saving mode from said normal mode, informing said radio-signal base station of such mode-transfer;

determining an interval at which said mobile wireless terminal receives
15 signals, said interval being equal to $N \times I$ wherein N is a positive integer equal to or greater than two (2), and I indicates an interval at which said radio-signal base station transmits said announce signal;

receiving said informative signal from said radio-signal base station at said interval when said mobile wireless terminal is in said power-saving mode;

20 if the received informative signal includes information indicating that said radio-signal base station stores packet signals addressed to said mobile wireless terminal, requesting said radio-signal base station to transmit said packet signals to said mobile wireless terminal;

judging whether said packet signals are necessary to be received in
25 real-time communication, based on a protocol of the received packet signals;

when said packet signals are judged to be necessary to be received in real-time communication, transferring to said normal mode from said power-saving mode, and informing said radio-signal base station of such mode-transfer; and

transferring to said power-saving mode from said normal mode when said packet signals have been all transmitted to said mobile wireless terminal.

15. A wireless communication system including a radio-signal base station,
5 and at least one mobile wireless terminal which operates in a power-saving mode in which said mobile wireless terminal intermittently receives packet signals, and in a normal mode in which said mobile wireless terminal regularly receives packet signals,

wherein when said radio-signal base station receives packet signals
10 addressed to a mobile wireless terminal being in said power-saving mode, said radio-signal base station temporarily stores the received packet signals until said mobile wireless terminal requests said radio-signal base station to transmit said packet signals thereto, and

said mobile wireless terminal requests said radio-signal base station to
15 transmit said packet signals thereto and transfers to said normal mode from said power-saving mode, if said mobile wireless terminal judges that the received packet signals are packet signals to be received in real-time communication, said mobile wireless terminal receives entirety of said packet signals in said normal mode, and said mobile wireless terminal transfers to said power-saving mode
20 when said packet signals have been all received in real-time communication.

16. The wireless communication system as set forth in claim 15, wherein if said mobile wireless terminal judges that the received packet signals are packet signal not necessary to be received in real-time communication, said mobile
25 wireless terminal transfers to said power-saving mode from said normal mode.

17. The wireless communication system as set forth in claim 15, wherein said mobile wireless terminal transfers to said power-saving mode when entirety of said packet signals has been received.

18. The wireless communication system as set forth in claim 15, wherein said radio-signal base station periodically transmits an informative signal to said mobile wireless terminal being in said power-saving mode, and said mobile
5 wireless terminal is aware that packet signals addressed to said mobile wireless terminal are stored in said radio-signal base station, by analyzing the received informative signal.

19. The wireless communication system as set forth in claim 18, wherein
10 said mobile wireless terminal receives said informative signal in said power-saving mode at an interval determined by itself.

20. The wireless communication system as set forth in claim 15, wherein if said mobile wireless terminal judges that it would not be necessary to carry out
15 real-time communication for receiving entirety of said packet signals, said mobile wireless terminal intermittently receives said packet signals at a certain interval in said power-saving mode.

21. The wireless communication system as set forth in claim 18, wherein
20 said mobile wireless terminal receives said packet signals at an interval at which said mobile wireless terminal receives said informative signal from said radio-signal base station.

22. The wireless communication system as set forth in claim 18, wherein
25 said mobile wireless terminal receives said packet signals at an interval equal to $N \times I$, wherein said I indicates an interval at which said mobile wireless terminal receives said informative signal from said radio-signal base station, and said N is a positive integer equal to or greater than two (2).

23. The wireless communication system as set forth in claim 15, wherein said mobile wireless terminal sets a longer interval at which said mobile wireless terminal receives said packet signals, for a smaller frequency at which said packet signals are transmitted from said radio-signal base station.

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24. The wireless communication system as set forth in claim 15, wherein said mobile wireless terminal sets a longer interval at which said mobile wireless terminal receives said packet signals, if said mobile wireless terminal cannot receive said announcement from said radio-signal base station.

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25. The wireless communication system as set forth in claim 15, wherein said mobile wireless terminal checks whether the received packet signals include data indicative of commencement of real-time communication, and if the received packet signals include such data, said mobile wireless terminal judges said packet signal to be received in real-time communication.

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26. The wireless communication system as set forth in claim 15, wherein said mobile wireless terminal checks whether the received packet signals include real-time transmission protocol, and if the received packet signals include said real-time transmission protocol, said mobile wireless terminal judges said packet signal to be received in real-time communication.

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27. The wireless communication system as set forth in claim 15, wherein said mobile wireless terminal is comprised of a cellular phone.

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28. The wireless communication system as set forth in claim 15, wherein said radio-signal base station includes functions of:

transmitting packet signals for real-time communication to a communication network after certain protocol communication;

memorizing a mobile wireless terminal(s) which is(are) in said power-saving mode, among a plurality of mobile wireless terminals;

periodically transmitting an informative signal to said mobile wireless terminal which is in said power-saving mode;

5 temporarily storing packet signals addressed to said mobile wireless terminal which is in said power-saving mode;

when said radio-signal base station stores packet signals addressed to said mobile wireless terminal which is in said power-saving mode, combining information indicating so to said informative signal; and

10 on receipt of a request from said mobile wireless terminal to transmit said packet signals stored therein, to said mobile wireless terminal, transmitting said packet signals intermittently to a mobile wireless terminal which is in said power-saving mode, but regularly to said mobile wireless terminal, if said mobile wireless terminal is transferred to said normal mode.

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29. The wireless communication system as set forth in claim 15, wherein said mobile wireless terminal includes functions of:

when said mobile wireless terminal transfers to said power-saving mode from said normal mode, informing said radio-signal base station of such
20 mode-transfer;

determining an interval at which said mobile wireless terminal receives signals, said interval being equal to $N \times I$ wherein N is a positive integer equal to or greater than two (2), and I indicates an interval at which said radio-signal base station transmits said announce signal;

25 receiving said informative signal from said radio-signal base station at said interval when said mobile wireless terminal is in said power-saving mode;

if the received informative signal includes information indicating that said radio-signal base station stores packet signals addressed to said mobile wireless terminal, requesting said radio-signal base station to transmit said packet

signals to said mobile wireless terminal;

judging whether said packet signals are necessary to be received in real-time communication, based on a protocol of the received packet signals;

requesting said radio-signal base station to transmit all of said packet
5 signals to said mobile wireless terminal, and transferring to said normal mode from said power-saving mode;

transferring to said power-saving mode from said normal mode when said packet signals have been all transmitted to said mobile wireless terminal.

10 30. A method of making wireless communication system between a radio-signal base station and at least one mobile wireless terminal which operates in a power-saving mode in which said mobile wireless terminal intermittently receives packet signals, and in a normal mode in which said mobile wireless terminal regularly receives packet signals,

15 said method including the steps of:

(a) receiving packet signals addressed to a mobile wireless terminal being in said power-saving mode;

(b) temporarily storing the received packet signals until said mobile wireless terminal requests said radio-signal base station to transmit said packet signals
20 thereto;

(c) requesting said radio-signal base station to transmit said packet signals thereto;

(d) receiving a part of said packet signal from said radio-signal base station;
and

25 (e) if said mobile wireless terminal judges that it would be necessary to carry out real-time communication for receiving entirety of said packet signals, transferring to said normal mode from said power-saving mode for receiving entirety of said packet signals,

said steps (a) and (b) being carried out by said radio-signal base station, and

said steps (c) to (e) being carried out by said mobile wireless terminal.

31. The method as set forth in claim 30, further comprising the step of transferring to said power-saving mode when entirety of said packet signals has
5 been received, the step being carried out by said mobile wireless terminal.

32. The method as set forth in claim 30, further comprising the step of periodically transmitting an informative signal to said mobile wireless terminal being in said power-saving mode such that said mobile wireless terminal is aware
10 that packet signals addressed to said mobile wireless terminal are stored in said radio-signal base station, by analyzing the received informative signal, the step being carried out by said radio-signal base station.

33. The method as set forth in claim 32, further comprising the step of
15 receiving said informative signal in said power-saving mode at an interval determined by itself, the step being carried out by said mobile wireless terminal.

34. The method as set forth in claim 30, further comprising the step of, if said mobile wireless terminal judges that it would not be necessary to carry out
20 real-time communication for receiving entirety of said packet signals, intermittently receiving said packet signals at a certain interval in said power-saving mode, the step being carried out by said mobile wireless terminal.

35. The method as set forth in claim 32, further comprising the step of
25 receiving said packet signals at an interval at which said mobile wireless terminal receives said informative signal from said radio-signal base station, the step being carried out by said mobile wireless terminal.

36. The method as set forth in claim 32, further comprising the step of

receiving said packet signals at an interval equal to $N \times I$, wherein said I indicates an interval at which said mobile wireless terminal receives said informative signal from said radio-signal base station, and said N is a positive integer equal to or greater than two (2), the step being carried out by said mobile
5 wireless terminal.

37. The method as set forth in claim 30, further comprising the step of setting a longer interval at which said mobile wireless terminal receives said packet signals, for a smaller frequency at which said packet signals are
10 transmitted from said radio-signal base station, the step being carried out by said mobile wireless terminal.

38. The method as set forth in claim 32, further comprising the step of setting a longer interval at which said mobile wireless terminal receives said
15 packet signals, if said mobile wireless terminal cannot receive said informative signal from said radio-signal base station, the step being carried out by said mobile wireless terminal.

39. The method as set forth in claim 30, further comprising the steps of
20 checking whether the received packet signals include data indicative of commencement of real-time communication, and, if the received packet signals include such data, judging said packet signal to be received in real-time communication, the steps being carried out by said mobile wireless terminal.

25 40. The method as set forth in claim 30, further comprising the steps of checking whether the received packet signals include real-time transmission protocol, and, if the received packet signals include said real-time transmission protocol, judging said packet signal to be received in real-time communication, the step being carried out by said mobile wireless terminal.

41. A method of making wireless communication system between a radio-signal base station and at least one mobile wireless terminal which operates in a power-saving mode in which said mobile wireless terminal
5 intermittently receives packet signals, and in a normal mode in which said mobile wireless terminal regularly receives packet signals,

said method including the steps of:

(a) receiving packet signals addressed to a mobile wireless terminal being in said power-saving mode;

10 (b) temporarily storing the received packet signals until said mobile wireless terminal requests said radio-signal base station to transmit said packet signals thereto;

(c) requesting said radio-signal base station to transmit said packet signals thereto;

15 (d) transferring to said normal mode from said power-saving mode;

(e) if said mobile wireless terminal judges that the received packet signals are packet signals to be received in real-time communication, receiving entirety of said packet signals in said normal mode; and

(f) transferring to said power-saving mode when said packet signals have
20 been all received in real-time communication,

said steps (a) and (b) being carried out by said radio-signal base station, and said steps (c) to (f) being carried out by said mobile wireless terminal.

42. The method as set forth in claim 41, further comprising the step of, if
25 said mobile wireless terminal judges that the received packet signals are packet signal not necessary to be received in real-time communication, transferring to said power-saving mode from said normal mode, said step being carried out by said mobile wireless terminal.

43. The method as set forth in claim 41, further comprising the step of transferring to said power-saving mode when entirety of said packet signals has been received, the step being carried out by said mobile wireless terminal.

5 44. The method as set forth in claim 41, further comprising the step of periodically transmitting an informative signal to said mobile wireless terminal being in said power-saving mode such that said mobile wireless terminal is aware that packet signals addressed to said mobile wireless terminal are stored in said radio-signal base station, by analyzing the received informative signal, the step
10 being carried out by said radio-signal base station.

15 45. The method as set forth in claim 44, further comprising the step of receiving said informative signal in said power-saving mode at an interval determined by itself, the step being carried out by said mobile wireless terminal.

20 46. The method as set forth in claim 41, further comprising the step of, if said mobile wireless terminal judges that it would not be necessary to carry out real-time communication for receiving entirety of said packet signals, intermittently receiving said packet signals at a certain interval in said power-saving mode, the step being carried out by said mobile wireless terminal.

25 47. The method as set forth in claim 44, further comprising the step of receiving said packet signals at an interval at which said mobile wireless terminal receives said informative signal from said radio-signal base station, the step being carried out by said mobile wireless terminal.

48. The method as set forth in claim 44, further comprising the step of receiving said packet signals at an interval equal to $N \times I$, wherein said I indicates an interval at which said mobile wireless terminal receives said

informative signal from said radio-signal base station, and said N is a positive integer equal to or greater than two (2), the step being carried out by said mobile wireless terminal.

5 49. The method as set forth in claim 41, further comprising the step of setting a longer interval at which said mobile wireless terminal receives said packet signals, for a smaller frequency at which said packet signals are transmitted from said radio-signal base station, the step being carried out by said mobile wireless terminal.

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50. The method as set forth in claim 41, further comprising the step of setting a longer interval at which said mobile wireless terminal receives said packet signals, if said mobile wireless terminal cannot receive said informative signal from said radio-signal base station, the step being carried out by said
15 mobile wireless terminal.

51. The method as set forth in claim 41, further comprising the steps of checking whether the received packet signals include data indicative of commencement of real-time communication, and, if the received packet signals
20 include such data, judging said packet signal to be received in real-time communication, the steps being carried out by said mobile wireless terminal.

52. The method as set forth in claim 41, further comprising the steps of checking whether the received packet signals include real-time transmission
25 protocol, and, if the received packet signals include said real-time transmission protocol, judging said packet signal to be received in real-time communication, the step being carried out by said mobile wireless terminal.

53. A mobile wireless terminal used in combination with a radio-signal base

station in a wireless communication system, said radio-signal base station, when said radio-signal base station receives packet signals addressed to a mobile wireless terminal being in a power-saving mode, temporarily storing the received packet signals until said mobile wireless terminal requests said radio-signal base station to transmit said packet signals thereto,

wherein said mobile wireless terminal operates in a power-saving mode in which said mobile wireless terminal intermittently receives packet signals, and in a normal mode in which said mobile wireless terminal regularly receives packet signals,

said mobile wireless terminal requests said radio-signal base station to transmit said packet signals thereto, receives a part of said packet signal from said radio-signal base station, and, if said mobile wireless terminal judges that it would be necessary to carry out real-time communication for receiving entirety of said packet signals, transfers to said normal mode from said power-saving mode for receiving entirety of said packet signals.

54. The mobile wireless terminal as set forth in claim 53, wherein said mobile wireless terminal transfers to said power-saving mode when entirety of said packet signals has been received.

55. The mobile wireless terminal as set forth in claim 53, wherein said mobile wireless terminal is aware that packet signals addressed to said mobile wireless terminal are stored in said radio-signal base station, by analyzing a informative signal periodically transmitted from said radio-signal base station.

56. The mobile wireless terminal as set forth in claim 55, wherein said mobile wireless terminal receives said informative signal in said power-saving mode at an interval determined by itself.

57. The mobile wireless terminal as set forth in claim 53, wherein if said mobile wireless terminal judges that it would not be necessary to carry out real-time communication for receiving entirety of said packet signals, said mobile wireless terminal intermittently receives said packet signals at a certain interval
5 in said power-saving mode.

58. The mobile wireless terminal as set forth in claim 55, wherein said mobile wireless terminal receives said packet signals at an interval at which said mobile wireless terminal receives said informative signal from said radio-signal
10 base station.

59. The mobile wireless terminal as set forth in claim 55, wherein said mobile wireless terminal receives said packet signals at an interval equal to $N \times I$, wherein said I indicates an interval at which said mobile wireless terminal
15 receives said informative signal from said radio-signal base station, and said N is a positive integer equal to or greater than two (2).

60. The mobile wireless terminal as set forth in claim 53, wherein said mobile wireless terminal sets a longer interval at which said mobile wireless
20 terminal receives said packet signals, for a smaller frequency at which said packet signals are transmitted from said radio-signal base station.

61. The mobile wireless terminal as set forth in claim 53, wherein said mobile wireless terminal sets a longer interval at which said mobile wireless
25 terminal receives said packet signals, if said mobile wireless terminal cannot receive said informative signal from said radio-signal base station.

62. The wireless communication system as set forth in claim 53, wherein said mobile wireless terminal checks whether the received packet signals include

data indicative of commencement of real-time communication, and if the received packet signals include such data, said mobile wireless terminal judges said packet signal to be received in real-time communication.

5 63. The wireless communication system as set forth in claim 53, wherein said mobile wireless terminal checks whether the received packet signals include real-time transmission protocol, and if the received packet signals include said real-time transmission protocol, said mobile wireless terminal judges said packet signal to be received in real-time communication.

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64. The wireless communication system as set forth in claim 53, wherein said mobile wireless terminal is comprised of a cellular phone.

15 65. The mobile wireless terminal as set forth in claim 53, wherein said mobile wireless terminal includes functions of:

when said mobile wireless terminal transfers to said power-saving mode from said normal mode, informing said radio-signal base station of such mode-transfer;

20 determining an interval at which said mobile wireless terminal receives signals, said interval being equal to $N \times I$ wherein N is a positive integer equal to or greater than two (2), and I indicates an interval at which said radio-signal base station transmits said announce signal;

receiving said informative signal from said radio-signal base station at said interval when said mobile wireless terminal is in said power-saving mode;

25 if the received informative signal includes information indicating that said radio-signal base station stores packet signals addressed to said mobile wireless terminal, requesting said radio-signal base station to transmit said packet signals to said mobile wireless terminal;

judging whether said packet signals are necessary to be received in

real-time communication, based on a protocol of the received packet signals;

when said packet signals are judged to be necessary to be received in real-time communication, transferring to said normal mode from said power-saving mode, and informing said radio-signal base station of such mode-transfer; and

transferring to said power-saving mode from said normal mode when said packet signals have been all transmitted to said mobile wireless terminal.

66. A mobile wireless terminal used in combination with a radio-signal base station in a wireless communication system, said radio-signal base station, when said radio-signal base station receives packet signals addressed to a mobile wireless terminal being in a power-saving mode, temporarily storing the received packet signals until said mobile wireless terminal requests said radio-signal base station to transmit said packet signals thereto,

wherein said mobile wireless terminal operates in a power-saving mode in which said mobile wireless terminal intermittently receives packet signals, and in a normal mode in which said mobile wireless terminal regularly receives packet signals,

said mobile wireless terminal requests said radio-signal base station to transmit said packet signals thereto and transfers to said normal mode from said power-saving mode, if said mobile wireless terminal judges that the received packet signals are packet signals to be received in real-time communication, receives entirety of said packet signals in said normal mode, and transfers to said power-saving mode when said packet signals have been all received in real-time communication.

67. The mobile wireless terminal as set forth in claim 66, wherein if said mobile wireless terminal judges that the received packet signals are packet signal not necessary to be received in real-time communication, said mobile

wireless terminal transfers to said power-saving mode from said normal mode.

68. The mobile wireless terminal as set forth in claim 66, wherein said mobile wireless terminal transfers to said power-saving mode when entirety of
5 said packet signals has been received.

69. The mobile wireless terminal as set forth in claim 66, wherein said mobile wireless terminal is aware that packet signals addressed to said mobile wireless terminal are stored in said radio-signal base station, by analyzing a
10 informative signal periodically transmitted from said radio-signal base station.

70. The mobile wireless terminal as set forth in claim 69, wherein said mobile wireless terminal receives said informative signal in said power-saving mode at an interval determined by itself.
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71. The mobile wireless terminal as set forth in claim 66, wherein if said mobile wireless terminal judges that it would not be necessary to carry out real-time communication for receiving entirety of said packet signals, said mobile wireless terminal intermittently receives said packet signals at a certain interval
20 in said power-saving mode.

72. The mobile wireless terminal as set forth in claim 69, wherein said mobile wireless terminal receives said packet signals at an interval at which said mobile wireless terminal receives said informative signal from said radio-signal
25 base station.

73. The mobile wireless terminal as set forth in claim 69, wherein said mobile wireless terminal receives said packet signals at an interval equal to $N \times I$, wherein said I indicates an interval at which said mobile wireless terminal

receives said informative signal from said radio-signal base station, and said N is a positive integer equal to or greater than two (2).

74. The mobile wireless terminal as set forth in claim 66, wherein said
5 mobile wireless terminal sets a longer interval at which said mobile wireless terminal receives said packet signals, for a smaller frequency at which said packet signals are transmitted from said radio-signal base station.

75. The mobile wireless terminal as set forth in claim 66, wherein said
10 mobile wireless terminal sets a longer interval at which said mobile wireless terminal receives said packet signals, if said mobile wireless terminal cannot receive said announcement from said radio-signal base station.

76. The mobile wireless terminal as set forth in claim 66, wherein said
15 mobile wireless terminal checks whether the received packet signals include data indicative of commencement of real-time communication, and if the received packet signals include such data, said mobile wireless terminal judges said packet signal to be received in real-time communication.

20 77. The mobile wireless terminal as set forth in claim 66, wherein said mobile wireless terminal checks whether the received packet signals include real-time transmission protocol, and if the received packet signals include said real-time transmission protocol, said mobile wireless terminal judges said packet signal to be received in real-time communication.

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78. The mobile wireless terminal as set forth in claim 66, wherein said mobile wireless terminal is comprised of a cellular phone.

79. The mobile wireless terminal as set forth in claim 66, wherein said

mobile wireless terminal includes functions of:

when said mobile wireless terminal transfers to said power-saving mode from said normal mode, informing said radio-signal base station of such mode-transfer;

5 determining an interval at which said mobile wireless terminal receives signals, said interval being equal to $N \times I$ wherein N is a positive integer equal to or greater than two (2), and I indicates an interval at which said radio-signal base station transmits said announce signal;

receiving said informative signal from said radio-signal base station at said
10 interval when said mobile wireless terminal is in said power-saving mode;

if the received informative signal includes information indicating that said radio-signal base station stores packet signals addressed to said mobile wireless terminal, requesting said radio-signal base station to transmit said packet signals to said mobile wireless terminal;

15 judging whether said packet signals are necessary to be received in real-time communication, based on a protocol of the received packet signals;

requesting said radio-signal base station to transmit all of said packet signals to said mobile wireless terminal, and transferring to said normal mode from said power-saving mode;

20 transferring to said power-saving mode from said normal mode when said packet signals have been all transmitted to said mobile wireless terminal.